

CPSC 231 Tutorial #5

michael-hung.ca/teaching

Reminders

TODAY

Quiz #3

TODAY

Assignment 2 Individual Component Due

Common Mistakes (So Far)

- Indentation Blocks
- Equivalency/Redundancy

Truth Tables

not

A	not A
T	?
F	?

Truth Tables

not

A	not A
T	F
F	T

Truth Tables

— — —

and

A	B	A and B
T	T	?
T	F	?
F	T	?
F	F	?

Truth Tables

and

A	B	A and B
T	T	T
T	F	F
F	T	F
F	F	F

Truth Tables

or

A	B	A or B
T	T	?
T	F	?
F	T	?
F	F	?

Truth Tables

or

A	B	A or B
T	T	T
T	F	T
F	T	T
F	F	F

Truth Tables

(A and B) or (not A or B)

A	not A	B	not A or B	A and B	(A and B) or (not A or B)
T	F	T	T	T	?
T	F	F	F	F	?
F	T	T	T	F	?
F	T	F	T	F	?

Truth Tables

(A and B) or (not A or B)

A	not A	B	not A or B	A and B	(A and B) or (not A or B)
T	F	T	T	T	T
T	F	F	F	F	F
F	T	T	T	F	T
F	T	F	F	F	F

Getting Input

- From the command line

```
import sys
...
arg1 = sys.argv[1]
arg2 = sys.argv[2]
...
```

- During runtime

```
myInput = input("Enter something...");
```

Parsing a String to a Number

Input from command line and `input()` both return strings

For some string `s`

```
int(s)
```

```
float(s)
```

Python will throw a **ValueError** if the types don't match up

```
e.g. int("one")
```

Operations

Addition	+	$1 + 1 = 2$
Subtraction	-	$2 - 1 = 1$
Multiplication	*	$2 * 2 = 4$
Division	/	$3 / 2 = 1.5$
Exponents	**	$3 ** 2 = 9$
Integer Division	//	$3 // 2 = 1$
Modulus	%	$11 \% 5 = 1$

Operations

Add to Self	+=
Subtract from Self	-=
Multiply Self	*=
Divide By Self	/=

Caution!

Float Arithmetic is weird!

Don't divide by zero!

Handling Errors

```
try:
```

```
    x = int(input("Enter an integer: "))
```

```
    break
```

```
except (ValueError):
```

```
    print("Not a valid integer")
```

```
...
```